

ABSTRACT OF THE DISCLOSUREMONOATOMIC AND MONOCRYSTALLINE LAYER OF LARGE SIZE,
IN DIAMOND TYPE CARBON, AND METHOD
FOR THE MANUFACTURE OF THIS LAYER

Monoatomic and monocrystalline layer of large size, in diamond type carbon, and method for the manufacture of this layer.

According to the invention, a monocrystalline substrate (2) is formed in SiC terminated by an atomic plane of carbon according to a reconstruction c(2x2) and at least one annealing is carried out, capable of
5 transforming this atomic plane, which is a plane of dimers $C\equiv C$ (4) of sp configuration, into a plane of dimers $C-C$ (8) of sp^3 configuration. Application to microelectronics, optics, optoelectronics, micromechanics and biomaterials.

10

Unique figure.